WHAT IS CLAIMED IS:

1. A method of processing a sample comprising

introducing a sample into a flow-through device containing a porous solid media therein, and

thereafter subjecting the device to microwave energy.

2. The method of claim 1 wherein said introducing said sample includes introducing said sample with a solvent to said flow-through device.

3. The method of claim 2 wherein said solvent is evaporated during said subjecting the device to microwave energy.

4. The method of claim 3 wherein said media is a chromatographic media.

5. The method of claim 1 wherein said sample includes reagents that undergo a chemical reaction to form a reaction product during said subjecting the device to microwave energy.

6. The method of claim 5 wherein said solid media includes scavengers attached to said solid media to remove excess reagents.

7. The method of claim 6 wherein said scavengers are electrophile scavengers.

8. The method of claim 7 wherein said electrophile scavengers are selected from the group consisting of amino scavengers, $TsNHNH_2$ scavengers, and SH scavengers.

9. The method of claim 6 wherein said scavengers are nucleophile scavengers.

10. The method of claim 9 wherein said nucleophile scavengers are selected from the group consisting of TsCl scavengers and NCO scavengers.

11. The method of claim 6 wherein said scavengers are base scavengers.

12. The method of claim 11 wherein said base scavenger is a quaternary amine scavenger.

13. The method of claim 6 wherein said scavengers are acid scavengers.

14. The method of claim 13 wherein said acid scavengers are selected from the group consisting of TsOH scavengers and COOH scavengers.

15. The method of claim 5 wherein said solid media includes coupling agents attached to said solid media.

16. The method of claim 15 wherein said coupling agents are selected from the group consisting of DCC coupling agents, HOBt coupling agents, and NHS coupling agents.

17. The method of claim 5 wherein said solid media includes a catalyst attached to said solid media.

18. The method of claim 17 wherein said catalyst is TSOH.

19. The method of claim 5 wherein said solid media includes a catalyst remover attached to said solid media.

20. The method of claim 19 wherein said catalyst remover is DEAM.

21. A method of processing a sample comprising
introducing a sample into a flow-through device containing a porous solid media therein and active components attached to said solid media, and
thereafter subjecting the device to microwave energy, heat or UV energy in order to accelerate reactions implemented by said active components, said reactions resulting in a reaction product created from said sample.

22. The method of claim 21 further comprising thereafter transferring said reaction product from said flow-through device to a chromatography column.

23. A method of processing a sample comprising
introducing reagents into a flow-through device containing a porous solid media therein and active components attached to said solid media,
causing a synthesis reaction involving said reagents in said flow-through device and resulting in a reaction product,
thereafter placing said flow-through device into an entrance region within a chromatography column, and
thereafter carrying out chromatography on said reaction product.

24. The method of claim 23 further comprising subjecting the device to microwave energy during said causing step.

25. A chromatography sample module comprising
a flow-through member having an inlet and an outlet, and
a chromatography media prepacked within said flow-through member, treated with a sample dissolved in a solution, and dried, resulting in a dried sample on said chromatography media, said chromatography media being spaced from said inlet, so that said flow-through member defines a receiving region adapted to receiving a head piece for making a seal with said flow-through member,
said chromatography media including attached active components.

26. A chromatography sample module comprising a tubular member that is sized to fit entirely within the end of a chromatography column containing a separation media carrying a sample, said module having an inlet and an outlet, and chromatography media within said tubular member and spaced from said inlet, so that said tubular member defines a receiving region adapted to receive a head piece, said tubular member sized to be sealed within said chromatography column with a sealing device used to seal said chromatography column, said chromatography media including attached active components.

27. A chromatography sample module comprising
a flow-through member having walls and having an inlet end and an outlet end;
a media disposed within said flow-through member, said media being spaced from said inlet end so that said walls extend above said media and so that said flow-through member defines a receiving region adapted to receive a head piece; and
a sample carried on said media,
said chromatography media including attached active components.

28. The method of claim 21, 22, 23, or 24 wherein said active components are at least one member selected from the group consisting of scavengers, coupling agents, catalysts, and catalyst removers.

29. The module of claims 26 or 27 wherein said active components are at least one member selected from the group consisting of scavengers, coupling agents, catalysts, and catalyst removers.

30. A method of processing a sample comprising
introducing a sample into a flow-through device containing a porous solid media therein, and thereafter subjecting the device to a radiated energy source.

31. The method of claim 30 wherein said radiated energy source provides microwave energy.

32. The method of claim 30 wherein said radiated energy source provides ultra-violet energy.

33. The method of claim 30 wherein said radiated energy source provides sonic energy.

34. A method of processing a sample comprising
introducing a sample into a flow-through device containing a porous solid media therein and active components attached to said solid media, and

thereafter subjecting the device to energy in order to accelerate or promote reactions implemented by said active components, said reactions resulting in a reaction product created from said sample.

35. A method of processing a sample comprising
introducing a sample into a flow-through device containing a porous solid media therein and active components attached to said solid media, said device having a liquid receiving region above said media,
carrying out a reaction on said sample using said active components, and
adding wash solvent to said liquid receiving region.

36. A method of processing a sample comprising
introducing reagents into a flow-through device containing a porous solid media therein and active components attached to said solid media,
causing a chemical reaction involving said reagents in said flow-through device and resulting in a reaction product,
thereafter placing said flow-through device into fluid flow communication with a chromatography column, and
thereafter carrying out chromatography on said reaction product.

37. The method of claim 36 further comprising subjecting the device to energy in order to accelerate or promote said chemical reaction.

38. The method of claim 36 wherein said device is placed into said chromatography column.

39. The method of claim 36 wherein said device is connected to said chromatography column by a tube.

40. A sample processing module comprising
a tubular flow-through member that is sized to fit entirely within the end of a chromatography column containing a separation media carrying a sample, said module

having an inlet and an outlet, and media within said tubular member, said chromatography media including attached active components.

41. A chromatography sample module comprising
a flow-through member having walls and having an inlet end and an outlet end;
a media disposed within said flow-through member; and
a sample within said flow through member,
said media including attached active components.

42. The module of claim 40 or 41 further comprising a porous frit in said flow-through member to contain said media.

43. The module of claim 40 or 41 further comprising a porous frit in said flow-through member to contain said media, said frit being flush with said inlet end or said outlet end.

44. The module of claim 40 or 41 wherein said flow through member has a liquid receiving region between said media and said inlet to enable wash solvent to be added to said flow through member.

45. A method of processing a sample comprising
introducing a sample into a flow-through device,
subjecting the flow-through device and said sample therein to a radiated energy source while causing a change to said sample, and
flowing liquid through said flow-through device to carry said sample to a chromatography column.

46. The method of claim 45 wherein said flow-through device has porous or solid media including attached active components therein.

47. The method of claim 45 wherein said subjecting comprises subjecting the flow-through device and the sample therein to a microwave energy source.

48. The method of claim 45 wherein said sample includes reagents that undergo a chemical reaction to form a reaction product during said subjecting, and wherein said flowing involves carrying said reaction product to said chromatography column.

49. The method of claim 46 wherein said media comprises solid media.

50. The method of claim 49 wherein said solid media comprises beads.

51. The method of claim 45 wherein said flow-through device does not have media.

52. The method of claim 45 wherein said flow-through device is made of glass

53. The method of claim 45 wherein said flow-through device is made of plastic.

54. The method of claim 45 further comprising, after said subjecting, connecting said flow-through device to said chromatography column by an outflow line from said flow-through device to said chromatography column.

55. The method of claim 45 further comprising, after said subjecting, connecting said flow-through device to said chromatography column by inserting said flow-through device into a holder having an outflow line to said chromatography column.

56. The method of claim 45 further comprising, after said subjecting, connecting said flow-through device to said chromatography column by inserting said flow-through device into a receiving region at an inlet area of said chromatography column.

57. A system for processing a sample comprising

a flow-through device receiving said sample therein,

a radiated energy source receiving said flow-through device and said sample in said device to apply radiated energy to said flow-through device and said sample while causing a change to said sample, and

a chromatography column connectable to said flow-through device to receive said sample therefrom.

58. The system of claim 57 wherein said flow-through device has porous or solid media including attached active components therein.

59. The system of claim 57 wherein said radiated energy source provides microwave energy.

60. The system of claim 57 wherein said sample includes reagents that undergo a chemical reaction to form a reaction product.

61. The system of claim 58 wherein said media comprises solid media

62. The system of claim 61 wherein said solid media comprises beads.

63. The system of claim 57 wherein said flow-through device does not have media therein.

64. The system of claim 57 wherein said flow-through device is made of glass

65. The system of claim 57 wherein said flow-through device is made of plastic.

66. The system of claim 57 further comprising an outflow line from said flow-through device to said chromatography column.

67. The system of claim 57 further comprising a holder receiving said flow-through device, said holder having an outflow line to said chromatography column.

68. The system of claim 57 wherein said chromatography column has a receiving region at an inlet area of said chromatography column for receiving said flow-through device.